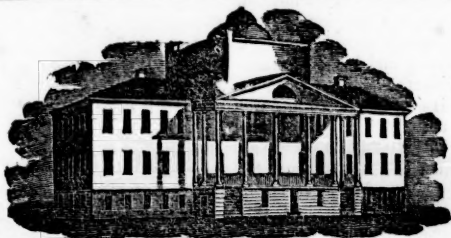


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I.

Nature and Treatment of Erysipelas.

THREE papers on these subjects are published in the last, the 14th, volume of the Medico-Chirurgical Transactions of London. They occupy over two hundred pages of the volume. It is proposed in the following article to offer the readers of this Journal a condensed view of these papers. Erysipelas has within a few years attracted much attention, and a great amount of very valuable information respecting it has been published. These papers, along with the particular views of the authors, furnish useful summaries of what others have done. The first is by Mr. Lawrence. He agrees with those who regard erysipelas as an affection essentially inflammatory. In its simplest form, when it only affects the surface, it is called *erythema*. *Simple erysipelas* is a more violent cutaneous affection, with effusion into the cellular texture, and

generally with vesication; *phlegmonous erysipelas* is the severest form; it involves the cellular and adipous membrane, and causes in them suppuration and mortification. The following description of *simple erysipelas* is from Mr. Lawrence's paper.

"In *simple erysipelas* the skin is preternaturally red and shining, having a light or rosy tint in the early stage and slighter cases of the affection; whence in some languages it has received the popular appellation of the *rose*; while in other instances it is of a bright scarlet, or even a deep and livid red. The color disappears on pressure, returning as soon as the pressure is removed. If the skin alone be affected, there is hardly any perceptible swelling, and no tension; yet some difference is perceived between the sound and the inflamed part by pressing the finger over it. Erysipelas, however, is seldom confined to the skin, except in the slightest cases; effusion soon takes place into the cellular tex-

ture, causing a soft swelling ; and this may be considerable, together with much tension and a shining surface, when a large part of the body, or an entire limb, is involved. The inflamed part is hot and painful ; at first a stinging or itching is felt, which soon becomes a sharp smarting and burning sensation, with acute pain on pressure. The pain is not so intense and unremitting as in phlegmon, nor is it attended with throbbing. This kind of inflammation often ends by resolution ; the redness and other symptoms disappearing, and the skin recovering its natural state, with or without desquamation of the cuticle. Frequently serous effusion takes place from the inflamed surface, elevating the cuticle into smaller or larger vesicles, or into bullæ like those produced by blisters, or raising it by a soft yellow jelly-like deposit, which remains slightly adherent to both the cutis and cuticle, and exactly resembles the effect often produced by the common blistering plaster. The contents of the vesicles or bullæ are transparent, sometimes nearly colorless, but more commonly yellowish ; sometimes they consist of a thin pus ; or they may exhibit a bloody or livid discoloration (phlyctenæ). The fluid loses its clearness, becoming thicker, opaque, and whitish or yellowish. The cuticle gives way, the fluid escapes, and incrustations form, which soon fall off, leaving the skin sound ; or they may lead to superficial ulcerations. Erysipelas sometimes produces gangrene, but this is a comparatively rare occurrence. So long as this inflammation is confined to the skin, it does not produce suppuration ; and the affection of the cellular structure

is too slight for that termination in most cases of simple erysipelas. It may, however, become more severe at one point ; and thus we occasionally see the formation of abscess under the skin towards the decline, or after the disappearance of the general erysipelatous redness.

"This inflammation generally attacks a considerable surface of the skin, the inflamed part being irregularly circumscribed by a defined line. It spreads quickly to the neighboring skin, declining and disappearing in the part first affected ; and this alternation is repeated until the whole surface of the head and face, of a limb, or of the trunk, has been successively inflamed. Thus we commonly see the various stages of erysipelas existing together at the same time in different parts of the skin ; the portion last affected is red and swelled ; another part is vesicated, while others exhibit incrustation and desquamation. Sometimes it leaves entirely the part first affected, to appear in a distant situation. Its origin, development, and complete termination, seldom take place in one and the same spot. The neighboring absorbent glands are frequently inflamed, and red streaks are sometimes seen leading towards them.

"The local symptoms, above described, are preceded and accompanied by fever, which varies in its character according to the constitution, age, and general state of health. Shivering followed by increased heat, general uneasiness, lassitude, headache, loss of appetite, nausea, white or foul tongue, and constipation, usher in a severe attack, and the general disturbance is of a decidedly inflam-

matory character in the young, strong, and those of full habit. Blood drawn from a vein exhibits in a greater or less degree the inflammatory character. Often, particularly when the head is the seat of erysipelas, the sensorium is principally affected, and the symptoms are of the kind called nervous, such as pain and oppression of the head, sleepiness, coma or delirium. The tongue in such cases becomes dry and brown; but this state of the organ is often owing principally to the circumstance of the patient breathing entirely through the mouth; the pulse is rapid and feeble, and there is great loss of muscular strength; in short, the symptoms at length are those called typhoid. In other cases the circulation and the nervous system are not much affected; but there is pain in the epigastric region, foul tongue with bad taste in the mouth, nausea, and constipation; that is, so many indications of disordered stomach and intestinal canal, to which, as its cause, the local affection must be referred.

"It is not to be expected that an affection, of which the obvious symptoms during life are merely vascular distension and redness with swelling, will produce much change in the affected parts recognizable after death. In simple erysipelas the red color disappears as soon as the circulation stops. The cuticle, if not already separated by vesication, soon loses its adhesion to the cutis, and the surface of the latter, in an advanced stage of the affection, has a livid appearance. The texture of the skin presenting a reddish or brownish tint, is loaded with serum, and softer than in the natural state. Serous effusion is found in the cel-

lular tissue: and its vessels, as well as those of the skin, are distended. Sometimes we unexpectedly discover suppuration where the case has appeared during life to be simple erysipelas, and no symptoms indicating formation of matter have been noticed."

Phlegmonous Erysipelas.—This form of the disease differs from the simple in the higher degree of inflammation, and its deeper extent. These circumstances are manifested alike in the greater violence of both the local and constitutional symptoms. Thus says Mr. Lawrence:—

"The redness is deeper than in simple erysipelas, often with a brownish or dark livid tint; the discoloration is often irregular, giving to the part a marbled appearance; the tumefaction is more considerable, the whole depth of the adipous and cellular textures being loaded with effusion, so that an arm or leg appears of twice the natural size; the sensation of heat and pain, at first slight, is aggravated to a very severe degree, and may be accompanied by throbbing. The swollen part at first yields slightly to the pressure of the finger, but subsequently becomes tense and firm. Vesications form on the surface, often minute and miliary, with purulent contents; frequently however the skin does not vesicate. Suppuration and sloughing of the cellular membrane soon come on, the skin becoming livid and covered with phlyctænæ, and the febrile symptoms are aggravated. These changes are not attended with increased swelling, elevation, and pointing, as in phlegmon; on the contrary, there is rather a diminution of tension, a subsidence,

and a feel of softness in the part. At first the cellular texture contains a whey-like or whitish serum, which I have sometimes seen in the eyelids almost of milky whiteness. The fluid gradually becomes yellow and purulent, and we often find it presenting all the characters of good pus, and very thick. The serum is diffused through the cells at an early period, and a mixture of serum and pus often fills a considerable portion of the cellular texture without any distinct boundary. Frequently matter is deposited in small separate portions, forming a kind of little abscesses, which often run irregularly in the cellular texture. Such small collections are sometimes found where lividity or phlyctænæ have not preceded, and where no external changes nor any aggravation of other symptoms have announced suppuration. During this process of suppuration the cellular texture turns grey, yellowish or tawny, and sometimes appears like a dirty, spongy substance filled with turbid fluid; then losing its vitality altogether, it is converted into more or less considerable fibrous shreds, of various size and figure, which come away soaked with matter like a sponge. The integuments over a large slough of this kind, being deprived of their vascular supply, become livid, and often lose their vitality. The suppurating and sloughing processes go on to a great extent when an entire limb is affected, sometimes completely detaching the skin, and often separating it through a large space; occasionally penetrating deeper, passing between the muscles, causing inflammation of them, suppuration between them, and often slough-

ing of the tendons. When the substance of a limb is thus generally inflamed, the joints situated in the affected part do not escape. Inflammation of the synovial membrane, effusion of matter into the joint, and ulceration of the cartilages, take place. An inflammation of such extent and violence cannot fail to excite the most serious sympathetic affections, among which may be mentioned disturbance of the nervous system, causing symptoms of typhoid character, inflammation of the lungs or pleura, of the intestinal mucous membrane, producing diarrhœa, or of the peritoneum, and inflammation or suppuration of other organs. The combination of the primary and secondary affections is speedily fatal. If, however, the patient should recover after tedious suppurations and discharge of sloughs, the parts, which have been inflamed, are so changed in structure, and skin, fascia, muscles, tendons, and bones, are so unnaturally agglutinated and fixed, after the extensive destruction of the connecting cellular texture, that the motions of the part are permanently and seriously impaired.

“The affected part, which is at first firm and almost brawny to the feel, becomes softer when diffused suppuration and matter mixed with sloughs are under the skin.

“Phlegmonous erysipelas spreads like the simple species to new parts successively; we notice a visible advance of the redness and swelling every day, and thus the affection is in different stages in the different portions of the inflamed part. The absorbent glands are generally more or less swollen, and the absorbent ves-

sels are frequently inflamed in the commencement of the affection."

The following extracts are from the section on the seat and nature of erysipelas. The quotations contain some of Mr. Lawrence's views. Much valuable criticism of the opinions of others is omitted.

"A consideration of the origin, development and effects of erysipelas, of all its phenomena, whether local or general, leads us irresistibly to the conclusion that the nature of the affection is inflammatory. In its four leading characters of redness, swelling, heat, and pain, and in its effects of effusion, suppuration, and sloughing, it agrees with what is called common or phlegmonous inflammation; while the general disturbance, preceding and accompanying the local affection, is often exactly alike in the two cases. Erysipelas then is merely a particular modification of cutaneous or cutaneous and cellular inflammation. If we were to class these according to their natural affinities, we should place erysipelas between the exanthemata and phlegmon. It is less diffused than the former, not so circumscribed as the latter. The exanthemata are confined to the skin; erysipelas affects both skin and cellular structure; while phlegmon has its original seat in the latter, the skin being secondarily involved.

"The difference between erysipelas and phlegmon, however, is not merely in the original seat or degree of the disturbance; there is also a difference in kind. We may indeed say generally that phlegmon is a more violent inflammation than erysipelas, but slough-

ing of the cellular substance is more frequent in the latter than in the former. The most striking and important distinction between the two affections is that inflammation is confined to one spot in phlegmon, and is distinctly circumscribed in its seat, while it is diffused in erysipelas, and spreads without limit. This difference seems to depend on the adhesive character of the inflammatory process in the former; the substance called coagulating, coagulable, or organizable lymph, effused around the inflamed part, forms a boundary between it and the sound portion, which is altogether wanting in erysipelas. In the latter the effusion is serous; hence, when matter is formed, it is not confined to one spot, but becomes extensively diffused in the cellular tissue. We cannot at present explain the cause of this difference; that is, we do not know how it happens that coagulating lymph is poured out in the one case, and serum in the other. We are equally ignorant of the essential nature in many other modifications of inflammation, which are yet obviously distinct. No one could overlook the differences between inflammation of the finger from a wound, and that of whitlow, of chilblain, of erysipelas, of gout; yet who would explain the differences of vascular action which cause these distinctions.

"We must therefore admit, what even superficial observation will teach, that erysipelas is a peculiar modification of inflammation in the skin and cellular texture. I can however by no means agree with those who regard it as a distinct species of inflammation, and as capable, in that character,

of affecting various parts of the body as well as the skin. Some writers have referred to erysipelas certain inflammations of the conjunctiva, mouth, and fauces, of the respiratory and alimentary mucous surfaces, of the serous membranes in the head, chest and abdomen, and of the brain, abdominal and thoracic viscera. The proof of such an opinion would consist in showing that the same peculiarities, which distinguish erysipelas from other inflammations of the skin, are found in certain inflammations of the parts just enumerated, and that such affections may hence be distinguished from ordinary inflammations of the same organs. No attempt of this kind has been made; on the contrary, nothing can be more vague and unsatisfactory than the arguments by which Frank attempts to support this opinion. Since the distinguishing characters of erysipelas are clearly referrible to the peculiarities of the cutaneous and cellular structures in which it occurs, we could not expect to meet with the same affection in parts so differently organized as serous membranes and the viscera. The texture of mucous membranes presents indeed some traits of analogy to that of the skin, and there is a corresponding conformity in some of the morbid phenomena. Thus, so far as organization is concerned, we might suppose that mucous membranes would be susceptible of erysipelatous inflammation; but we see nothing that is clearly referrible to this head, either during life or in examinations after death, although these membranes and the skin exert over each other, in many cases, a powerful sympathetic influence."

(To be continued.)

II.

From the *Medico-Chirurg. Review.*

Spinal Irritation.

UNDER this term, for want of a better, Dr. Brown, Senior Physician to the Royal Infirmary of Glasgow, has published, in the second Number of the Glasgow Medical Journal, a very long and by no means uninteresting paper, on a peculiar affection of the spinal nerves, frequently met with in young females, and sometimes in grown women or even males, which has hitherto, we believe, remained unchronicled by the medical practitioner. This complaint is not generally of a serious nature in itself, but leads to nervous affections of a troublesome character, if long continued. The author warns the reader in limine, against confounding this complaint with certain spinal diseases, as lateral curvature, inflammation of the spine, &c.—diseases with which it may occasionally be complicated. The complaint in question, which our author refers to "increased irritability of some of the spinal nerves," will be understood best—at least in its more common form—by the statement of a case.

Case. "Miss C. aged 17, (September, 1822), of a robust make, and apparently in good health, for more than a year has complained of pain, situated below the left mamma. This has been fixed to one spot for nearly the whole time. It is a gnawing bruised feeling, increased materially by fatigue of any kind; and, after fatigue, it is attended with restlessness. It is relieved by reclining in the horizontal posture. It is not sore to the touch. The complaint has been treated by a sur-

geon in the country as a case of rheumatism. She has been bled and blistered for it, but without any good effect ; and at last it has occasioned so much anxiety in the minds of her relations, that she is brought to Glasgow, from a considerable distance, for the benefit of farther medical advice.

"On examining the spine, it is found to be perfectly of the natural shape and appearance ; but when pressure is made on it, about the 7th or 8th dorsal vertebra, she complains of a considerable feeling of tenderness, amounting even to pain ; and she finds that the uneasy sensation shoots forward exactly to the affected part of the breast. She had not paid any attention to this tender part of the spine ; indeed, she had no idea that there was any thing faulty there, till her attention was called to it by the examination.

"After I saw her, she had a dose of physic ; ten leeches were applied to the pained part of the spine, followed afterwards by a small blister ; and the horizontal posture was enjoined. She was nearly free of pain in a few days, and returned home, with directions to repeat the blister, and to avoid fatigue."

Dr. Brown could bring forward fifty cases of a similar nature, from the Journals of the Lock Hospital, and from his private notes, but deems it unnecessary. He adverts merely to some *varieties* in those symptoms which attend the disease, when seated, as in the above case, in the lower part of the dorsal vertebræ.

"The site of the pain in the breast varies much. It is needless to mention, that it is occasionally in one side of the chest, occasionally in the other ; but I

am confident that it is much more frequent in the right than in the left. It is sometimes within a few inches of the spine, but much more frequently it is nearer to the sternum, and occasionally it is immediately under this bone. It is generally described to be a weary or bruised pain. It is seldom increased by the touch, but sometimes, though rarely, it is tender when pressed. It is usually, though not always, relieved or even removed by the horizontal posture.

"The tender part of the *spine*, on the other hand, in a great number of instances, is not attended to. It is not thought of till the affected part of the back is pressed, or till a sponge dipped in hot water be applied to it. In either case, a very sensible pain is felt, which, especially when the sponge is used, is occasionally acute and continuous for some time. In general, pressing the spine not only occasions pain in that part, but the pain penetrates to the affected spot of the chest, thus distinctly proving the connexion between the two. It often happens that pressure on the spine occasions a feeling of oppression more than of pain in the chest.

"The pained part of the chest, in general, does not exceed an inch in diameter, though it occasionally happens that the uneasiness extends either above or below the tender part, appearing to radiate from it as from a centre, sometimes to a considerable distance. This pain of the side, excited by pressure, is almost in every instance felt on the same side of the spine as the pain in the chest. That is, if the patient have pain in the left side of the chest, then the left side of the

spinous process of the vertebra is more tender than the right, and *vice versa*."

There is seldom any fever with these symptoms—cough is not often present—though sometimes it is convulsive, noisy, and unattended by expectoration. In a girl in the Lock-Hospital, there was pain in the left side of the sternum, as if the part had been bruised. This was distinctly connected with a tender state of the spine, below the middle of the dorsal vertebræ. In two other cases, there was, along with tenderness of the spine, an extended superficial sense of rawness and pain over one side of the thorax, extending even to the abdomen. It required a month's horizontal posture and an issue in the back. According to our author's experience, the source of the complaint is more frequently situated about the 8th or 9th dorsal vertebra than elsewhere.

Next, in frequency, to the middle of the back, this disease locates itself in the upper part of the neck, about the 2d or 3d cervical vertebra. In one very complicated case, there appeared to be two sets of symptoms—each of which radiated from a tender part of the spine, as if from a centre. There was pain in the left side, and numbness and pain in the left arm and leg, distinctly connected with tenderness situated about the lower dorsal vertebræ. After a time, a similar state of the 2d or 3d cervical vertebra took place, occasioning pain in the left side of the neck, commencing near the angle of the jaw, and extending upwards from the neck to the back part of the head, and even to the forehead, following the ramification of the 2d or 3d cervical nerve. These two sets of symp-

toms were sometimes entangled and blended together. Posture was tried—then issues were opened on each side of the pained part. After three months' confinement the pains had disappeared, and the patient was allowed to sit up; but the pains returned, and she was again placed recumbent. The malady at length was merged in phthisis, which put an end to her suffering. We are unable to follow Dr. Brown through all the cases he has adduced. These affections appear to him divisible into two classes—"those in which there is merely a morbid sensibility of a single nerve—and those in which there is a more general and constitutional irritability; in which the irritation is apt to affect different parts of the spine in succession, occasioning a train of singular symptoms." Dr. B. has rarely seen the pain in both sides at the same time. The following are the deductions or conclusions to which our author seems to have come.

"These are—that the immediate cause of the pain of the back and breast is spasm of one or other of the muscles, arranged along the spine, altering the position of the vertebræ, or otherwise compressing the nerves as they issue from the spinal marrow.

"That this spasm, in many instances, is strictly a *local* disease produced by fatigue, wrong posture, or other causes, and quite unconnected with the state of the brain, spinal marrow, or nervous system in general.

"But that, in other formidable instances, this partial, spasmodic, or wrong action of the muscles, is owing to a faulty state, perhaps an enlargement of the vessels of the brain, or spinal marrow. This

state of the brain, as in many other diseases, gives rise to spasm, or even to convulsion of the muscles; which partial symptom from its severity attracts the chief attention. This local affection is confined to those portions of the spine where there is the greatest motion, and where of course the muscles having the greatest activity, are most liable to deranged action or spasm. I imagine that this view of the subject is illustrated, and perhaps confirmed by various symptoms, which were observed in the different cases, and which without it, were very incomprehensible. The partial palsy, the affection of the sight, the giddiness of the head (for I find that this was a prominent symptom in several cases, especially in that of A. S.), all give some confirmation to the notion that the brain is affected in these severe cases.

"I have only to add farther, that if we pay attention to the number of the muscles, arranged along the spine, and to their functions, we shall see some reason for their being peculiarly liable to spasm. The variety of separate muscles in this situation is very great; and it ought to be kept in mind, that these are more constantly active than any other muscles, except the involuntary ones, since they are in a state of action in preserving the body in an erect state, as well as in every motion of the trunk.

"This state of the muscles, as being the immediate cause of the pain, and of various uneasy feelings, is certainly entitled to much attention, and we find it much moderated by posture, by local application, and especially by friction; but my conviction now is, that we ought to direct our at-

tention at the same time to the state of the brain, as being the source on which severe cases of this description depend."

III.

Iodine in Gout.

Communicated for the Boston Medical and Surgical Journal,

By GEORGE CHOATE, M.D.

THE following case is presented to the public, not from a belief that a solitary fact will establish the propriety or success of the practice; but because I am not aware that the remedy has been at all employed in this country for the cure of gout. This painful disease is yet a reproach to our art; and notwithstanding the extravagant encomiums which have been bestowed upon the various remedies and modes of practice heretofore adopted, they have all had a short-lived reputation and doubtful efficacy. Any well attested facts, therefore, which may have a tendency to call the attention of physicians to this powerful article of the *materia medica*, as applicable to a disease hitherto incurable, will neither be regarded as useless nor uninteresting. With a hope that the subject may be thoroughly investigated by those gentlemen, whose opportunities of seeing and treating the disease are more frequent than my own, I have been induced to report the result of a single case, in which the medicine appears to have exerted a prompt and decided influence. The uncertain effect of all other remedies, and the reported success of M. Gendrin, as lately communicated to the Royal Academy of Medicine, led me to make trial of the iodine.

Thursday, August 7th, was called to visit Mr. J. S. who was laboring under a severe fit of the gout. The paroxysm commenced two days previous. Found the right foot much swollen, exceedingly painful, and tender to the touch,—the inflammation extending along the extensor tendons of the toes, and surrounding the ankle joint; pulse 80; tongue slightly coated; appetite impaired; nights sleepless.

Directed tinct. iodine, gtts. vi. ter die; to be increased one drop at every dose, (strength \mathfrak{z} j. to alcohol \mathfrak{z} j.) Also frictions with the following ointment:—

Pulv. hydriod. potas. gr. xl.
Ung. simpl. \mathfrak{z} j. M.

The ointment to be applied freely to the inflamed limb, with the hand, morning and evening. No other medicine was prescribed during the treatment.

Friday, Aug. 8th. Symptoms much the same as yesterday, with the exception of constant nausea. The same effect was produced in the attendant who applied the frictions.

Saturday, Aug. 9th. The patient had slept well during the night; pulse 68 and soft; tongue nearly clean; appetite good; pain and inflammation very much abated. Has had two copious, dark colored and highly offensive dejections since yesterday.

Sunday, Aug. 10th. All appearances of disease gone, with the exception of slight stiffness and weakness of the joint, which continued for several days. Has had frequent dejections of the same character as those above described.

On Monday the patient was out attending to his business, which

required being on his feet nearly the whole day. On Tuesday he was attacked with slight pain and inflammation of left elbow joint, which was entirely removed by one or two applications of the ointment. He has since remained perfectly well.

This patient has long been subject to gout, having had regular attacks for at least nine years past, which at this season of the year have uniformly continued with severity for several weeks. He thinks the approach of the present paroxysm was as severe as any former one; and indeed was apprehensive of a tedious confinement, from the circumstance that the attack had held off longer than usual.

He represents all former attempts at relief, particularly topical applications, as having been followed by metastasis. In this instance the disease steadily and rapidly declined, without manifesting the least disposition to change place or return, if we except the slight impression at the elbow, which readily yielded to the iodine.

Salem, September 11, 1828.

IV.

SELECTIONS FROM FOREIGN JOURNALS.

The Conservation and Reproduction of the Medicinal Leech.

M. CHATELAIN has published two treatises on this subject. (*Annales de la Méd. Physiol.* Janv. 1827, and *Journal de Physiologie Experimentale*, tome VII. 1827.) His observations confirm the supposition that the leech is androgynous, and that the generative process is performed by recipro-

cal and simultaneous impregnation. One leech is capable of producing three capsules (cocons); but on an average, one capsule only is obtained from each individual, and nine leeches from each capsule. The author has observed, where a plurality of capsules occurred, that they were formed at intervals. The young escape from the capsule within twenty-six or twenty-eight days.

Contrary to the opinion of Dr. Pallas (*Journ. de Pharmacie*, Juin, 1827), M. Chatelain thinks sanguisuction is unfavorable to the fecundity of the leech. The plethora thus occasioned generally caused a mortality of one third of his leeches in the space of two or three months, notwithstanding frequent change of water and diversity of situation. In order to effect disgorgement of blood, the leeches were usually applied for four or five minutes to a solution of one part of common salt in ten of water. For their reception during the season, which M. Chatelain found, in Provence, to extend from the latter part of July to the middle of September, stone pans or jars, each containing a sufficient bed of moist clay, were arranged in the open air so as to be fully exposed to the sun. Two fine leeches were placed in each jar, which was then covered with a cloth of open texture, to prevent escape without excluding all light. With the same view, M. Chatelain was accustomed to draw a brush, dipped in equal parts of sulphuric acid and water, round the inside of the jar, about four or five inches above the clay. The jars were visited daily, and care taken to keep the clay moist.

It is remarkable that the pairs

could never be detected in the act of copulation. This was supposed to be accomplished within the burrows which these animals made in the clay.—*Lon. Med. Rep.*

The Preservation of Leeches.

M. Pfeufer, physician to the Hospital of Bamberg, recommends the use of a wooden tub, furnished with a cock and a long funnel, for the purpose of renewing the water, which should be done with as little disturbance as possible. At the bottom of the tub, he would have some mud from the pool whence the leeches were taken, with one or more roots of the *calamus aromaticus* or of the *iris florentina*. This was the method adopted by M. Chatelain, and is followed in most of the hospitals in France.

M. Schütz takes some ounces of fresh powdered charcoal, which he washes sufficiently with water; on this powder he pours a solution of twenty grains of sugar of milk in warm water. In this mixture he places his leeches, keeping them in a temperature between 50 and 55 deg. Fahr. The water, as well as the solution of the sugar of milk, is renewed every fortnight; great care being taken that the water be not too cold, and that the vessel be not much shaken.

M. Hampe uses small tubs charred on the inside, covered only with gauze. At the bottom is placed sand, and upon this some moss. River water only is employed, to which he adds a few lumps of charcoal. In summer, the water is changed weekly, by means of a hole pierced immediately above the layer of sand. In winter it is enough to change the water once in six weeks, pre-

venting the access of cold. This method is much recommended.

M. Voget also advises us to add to the water some of the soil to which the leeches have been accustomed; but the peculiarity of his method is the addition of oxide of iron.—*Bulletin des Sc. Med.*

Spontaneous Organization of Matter.

M. Bory de St. Vincent has occupied himself for some time past with a variety of microscopic observations, having for their object to prove the natural tendency of matter to become organized. Observing the appearances successively presented in water exposed to light, he thought he saw, for the first time, matter assume the aspect of a simple mucosity, without color or form. If the water contains any animal substance, it produces a pellicle of this mucosity at its surface, then becomes turbid, and discloses an infinity of living atoms, if we may so call those monads, which, after being magnified a thousand times, are not so large as the point of a needle, and which yet move in all directions with prodigious velocity. This is what M. Bory names matter in the living state. When the water is exposed to the air and light, there quickly forms what is named the green matter of Priestley, which many observers have supposed to be the first state of certain confervæ, or plants of a like nature. M. Bory thinks that it is a combination of a more general form, and only susceptible of entering into the composition of these plants, as well as of the animalcules which issue from it and which produce them. He names this combination matter in the

vegetative state. It is by it that the infusory animals are rendered green. Those which color oysters, according to M. Gaillon's observations, produce this effect, as M. Bory says, only because they are themselves colored by the green matter. It colors, in the same manner, the water and the shells of these oysters; and it would not be impossible to find some directly tinged by this matter, without any animalcules having penetrated into them.

New Method of administering Copaiba.

In consequence of the disgusting flavor of balsam of copaiba, and of the frequent adulterations of that valuable medicine, M. Dublanc, junior, has employed the volatile oil in preference to the balsam itself. This oil is very efficacious, whilst the resin is nearly inert. MM. Bard and Cuillierier have witnessed the success of this mode of administering the copaiba in thirty-three patients, who were cured in five or six days.

M. Dublanc forms a spirit of copaiba by distilling the essential oil with two thirds of its weight of alcohol. (Sp. qr. 837.) This is nearly free from the unpleasant smell and flavor of the drug.

M. Miathes states, that if bals. copaibæ be mixed with a seven-teenth of its weight of pure magnesia, it will acquire a degree of solidity sufficient to allow it to be formed into pills.—*Rev. Méd.*

Combination of Lime with Water.

According to M. Bellani, when lime combines with water, notwithstanding the intense chemical action which takes place and the heat involved, there is no ultimate

condensation between the elements of the hydrate. Lime was put into a matrass, and then the vessel filled to the middle of the neck with water; the place of the surface of the water was then marked, after which heat was applied and the lime converted into a hydrate, no vapor being allowed to escape; when the whole was cool, the place of the surface was exactly in the same part of the neck as at first.

Giornale de Fisica.

On the Active Principle of Hemlock.

According to MM. Brandes and Giseke, the best method of obtaining this vegeto-alkali consists in digesting the fresh plant for several days in alcohol, filtering and evaporating the liquid, mixing the residue with water, and acting either by alumina, magnesia, or the oxide of lead; the whole is then to be evaporated to dryness, and the substance obtained acted upon by a mixture of alcohol and ether; the solution being evaporated, yields the principle now distinguished by the name of Conin, (*Conia*). This principle is said to possess decided alkaline properties; its aqueous solution forms an abundant red precipitate, with tincture of iodine. Half a grain of the substance will kill a rabbit, the symptoms being the same as those produced by strychnia.—*Bull. Univ.*

Purification of Alcohol.

A prize was offered by the Royal Academy of Brussels to the person who should prove upon what the difference between alcohol, extracted from various substances, as fruits, grain, roots, sugar, &c. depended. This was obtained by M. Hensmans, who

was led, by numerous experiments, to conclude that the alcohol was always identical, but that the difficulty, more or less great, always found in rectifying it, as well also as the difference in taste, depended upon the presence of a fatty matter, and a little acetic ether. The fatty matter, when alone, may be separated by several distillations, but the acetic ether is not removed in this way. It is better in every case, for the removal of both, to add a little caustic potash, or soda, to the alcohol, to be rectified. Carbonated alkali does not act with sufficient energy.

Ibid.

On the different Medicinal Properties of Peroxide and Protoxide of Iron.

Iron is one of the most valuable articles of the materia medica. The PROTOXIDE acts as a genial stimulant and tonic in all cases of chronic debility not connected with organic congestion or inflammation. It is peculiarly efficacious in chlorosis. It appears to us that the PEROXIDE and its combinations are almost uniformly irritating, causing heartburn, febrile heat, and quickness of pulse. Many chalybeate mineral waters contain an exceedingly minute quantity of protocarbonate of iron, and yet exercise an astonishing power in recruiting the exhausted frame. We believe their virtue to be derived simply from the metal being oxydized to a *minimum*, and diffused by the agency of a mild acid through a great body of water, in which state it is rapidly taken up by the lacteals, and speedily imparts a ruddy hue to the wan countenance. We find that these qualities may be imitated exactly

by dissolving three grains of the sulphate of iron and sixty-one of bicarbonate of potass in a quart of cool water, with agitation in a cool vessel.—*Lond. Med. Rep.*

Medicinal Properties of Nux Vomica.

A correspondent in Essex, a surgeon-apothecary, in a very extensive practice, informs us that he has lately been administering nux vomica so freely as to use about six ounces in six months. A severe case of chronic diarrhœa, in which the patient appeared to be in a hopeless state, rapidly recovered under this remedy. It was given in powder, in a dose of five grains, three or four times a-day, all previous medicines having been of very little use to the patient.

A case of chorea, which had existed twelve months, and which had resisted all the ordinary means, recovered under the use of the nux vomica. Various cases of long-continued intermittent fever, several cases of which had been treated in vain by quinine, yielded to the pulv. nucis vomicæ.

Ibid.

V.

REPORTS OF CASES IN PRIVATE PRACTICE.

Case of Tubercular Disease of the Peritoneum suddenly terminating fatally; with the appearances on Dissection.

JULY 18, 1828. This patient, aged 24, a gardener, has been subject to cough, dyspnœa, palpitation and hæmoptysis, for some months past. These symptoms have recently been aggravated by hard labor, and exposure to change of temperature. About a month since, he observed his scrotum, thigh, and legs, to swell in suc-

cession, and within the last week the abdomen has become full, but neither hard nor tense. Cough and dyspnœa have also increased of late, but the palpitation has been less. Along with these symptoms, the tongue is dry, covered with a thin white coat; bad taste in the mouth; appetite small, cardialgia after food; colicky pains across abdomen; bowels regular; pulse 80, rather hard and throbbing; skin and complexion not morbid; sweats freely; urine abundant, straw-colored; sleep disturbed, obliged to lie with head and shoulders elevated; pain in lower part of chest; a sense of tickling referred to epigastrium, which he says excites cough; feels weak, but has worked within a day or two; has not used active remedies.

Various means were employed in this case, as bloodletting, vesication, mercurials, diuretics and cathartics, but with little alteration in the leading symptoms. The œdema of the extremities and scrotum indeed was removed under their use, but the size of the abdomen increased, and the pain in this part was occasionally extreme. What was especially remarked was, that though the urine was greatly increased in quantity, being, the 2d of August, between sixty and seventy ounces in the twenty-four hours, the ascites progressively increased. His sufferings were always great, and it was necessary to give the compound powder of ipecacuanha and opium, in full doses in order to procure rest. He died on the 17th of August. On the morning of that day he was found more than usually comfortable. Between twelve and one, noon, he was dressed, sitting on the side of his bed, and asked for some food; but before his nurse could bring it to him, he suddenly turned round on his bed, on his abdomen, and with scarcely a perceptible convulsion, died.

Examination of the body.—Slight emaciation. Upon opening the abdomen, a great gush of straw-colored

fluid followed the incision. The whole quantity was not collected, but from what was saved, it was estimated in all to amount to full three gallons. It was not easy to turn the flap made by the incisions over the pubes, on account of the extensive adhesions which existed between the omentum and parietal peritoneum. This being done, the omentum was discovered to be greatly thickened, solid, and every where covered by granular tubercles. The peritoneum, in like manner, was every where thickly studded with the same bodies, and was between one and two lines in thickness, every where opaque, and resembling a thin cartilage more than the ordinary texture. The intestines, also, were studded thickly with small white granular bodies, giving an extraordinary roughness to the whole surface. They were every where connected together by most delicate white, bridle-form adhesions. Some of these were an inch in length, crossing each other in every direction, forming the finest network. This appearance is not unfrequently noticed. But in this case it was very striking, especially when raising the intestines to draw them from the pelvis. The liver was sound.

In the thorax, upon raising the sternum, the pericardium was found to occupy an unusual extent of the chest. The lungs were sound, but were in some places slightly adherent to the pleura costalis. Five ounces of a fluid like that in the abdomen were taken from the pericardium. The heart was greatly enlarged. The left ventricle constituted the principal bulk of the organ.

It exhibited a deep red or purple color, and seemed to be distended with a great load of blood, and as if its bulk were owing to this contained mass. It felt perfectly solid to the hand, when firm pressure was made upon it. Upon cutting into it, it was found that its size and firmness were owing entirely to a pre-

ternatural thickening of the whole substance of this ventricle, and that its only contents were a very small coagulum, which was entangled in the mitral valve. The right ventricle was natural in thickness, but comparatively small, and contained a little blood. The valves were healthy. The thorax contained no fluid. W.C.

BOSTON MEDICAL ASSOCIATION.

JOHN A. BULFINCH, M.D. and G. HENRY LODGE, M.D. have been admitted members of this Association.

J. G. STEVENSON, *Sec'ry.*

WEEKLY REPORT OF DEATHS IN BOSTON,

Ending Sept. 20, at noon.

Sept. 11.	Eliza M. Trumbull,	15 mo.
12.	Son of Bradford Jones,	2 w.
	William Barnard,	22 yrs.
13.	Daniel Marquis,	11
	Ellen Trophy,	2
14.	Daniel Nichols,	87
	Charles J. Kendall,	2
	Mary Dawson,	56
	Sarah Jane Bass,	8
	Hannah Mendall,	28
	Jane L. Jackson,	8 mo.
15.	Dorcas S. Deluce,	8
	Catharine Dunckley,	22 yrs.
	John Fitzgerald,	32
16.	Martha Cummings,	21
	Simeon Gould,	72
	Anne Durivage,	66
	William L. Kehr,	7
	Leonard W. Kimball,	28
	Dolly Jones,	56
	Thomas Wareham,	12 mo.
17.	Ellen Whellen,	8
	Michael Daniels,	5
	Phineas Goff,	51 yrs.
	Mary Apthorp,	24
	Jesse Bogart,	4 1-2
18.	Rosy Wilson,	4
	George W. Blanchard,	16
19.	Abigail B. Gove,	6 mo.
	Desdy Lampson,	6
	George W. Hovey,	14
20.	Othniel French,	35 yrs.
	Elizabeth Stodder,	62
	Eleanor Duffey,	8 w.

Brain fever, 1—burn, 1—by taking bug poison, 1—consumption, 7—canker, 1—drowned in a cistern, 1—dysentery, 3—fever, 1—hooping cough, 2—inflammation in the bowels, 1—infantile, 2—lung fever, 2—liver complaint, 1—old age, 2—spasms, 1—teething, 1—unknown, 7. Males, 17—Females, 17. Stillborn, 2. Total, 36.

ADVERTISEMENTS.

MEDICAL INSTITUTION OF HARVARD UNIVERSITY.

THE MEDICAL LECTURES will begin on the third Wednesday in October, in the Massachusetts Medical College, Mason-street, Boston.

Anatomy and Surgery, by Dr. WARREN.
Chemistry, by Dr. WEBSTER.

Materia Medica, by Dr. BIGELOW.
Midwifery and Medical Jurisprudence, by Dr. CHANNING.

Theory and Practice of Physic, by Dr. JACKSON.

The Lectures continue thirteen weeks. The Class attend the Medical and Surgical Practice of the Massachusetts General Hospital, and Dr. Jackson's Clinical Lecture on the Cases, without fees.—Separate Lectures on the Principles of Surgery are given by Dr. Warren without fees. Arrangements have been made for the study of Practical Anatomy, which will probably afford as great facilities as can be desired, and at as low a rate as at any school in the United States. The use of the Library of the Massachusetts Medical College may be obtained during the Course, by paying one dollar. The Professor of Chemistry will receive private pupils for instruction in the Laboratory.

WALTER CHANNING,

Dean of the Faculty.

PRIZE DISSERTATION

On the Effects of Spirituous Liquors.

AT the Annual Meeting of the Massachusetts Medical Society in 1827, the following resolution was adopted:—

Resolved, That this Society will use the skill of its members in ascertaining the best mode of preventing and curing the habit of intemperance, and that for this purpose a premium of FIFTY DOLLARS shall be offered for the best Dissertation on the subject; which after being approved by the Counsellors shall be read at the next annual meeting of the Society, and afterwards printed; and that the authors be requested to point out the circumstances in which the abandonment of the habitual use of stimulating drinks is dangerous; and also to investigate the ef-

fect of the use of wine and ardent spirits on the different organs and textures of the human body."

In consequence of this resolution two dissertations were presented; but not being sent within the time specified, they could not be examined.

At the Annual Meeting of the Society in 1828, it was voted to renew the offer of the premium on the same conditions, and the undersigned were chosen to receive and examine the dissertations.

The dissertations presented for the premiums may be left at the office of Mr. John Cotton, Bookseller, Boston, or sent to the Chairman of the Committee; on or before the 15th day of April, 1829.

JOHN C. WARREN,
ZABDIEL B. ADAMS, } Committee.
JOHN WARE,

A dissertation marked "*Fons et Origo Mali*," is left at Mr. Cotton's Bookstore, for the author if he should desire it.

Editors of newspapers are respectfully requested to republish the above for the public good. aug 9.

Some persons having believed that the premium offered by the Mass. Med. Soc. for the best dissertation on Intemperance, is to be confined to the members of the Society, notice is hereby given that the above named premium is open to all who may incline to become candidates for it.

NATHAN JARVIS,

Druggist and Apothecary,

HAS taken the Apothecaries' Hall, No. 188, Washington Street (lately kept by Messrs. Wm. B. & Henry White.) His stock of Drugs and Medicines is complete and genuine. Physicians and others are assured that their orders, prescriptions, &c. will meet with prompt and strict personal attention.

The old friends of this establishment are requested to continue their patronage.

EUROPEAN LEECHES.

CHARLES WHITE, No. 269 Washington St., Corner of Winter St., has received a supply of GERMAN and PORTUGUESE LEECHES.

Published weekly, by JOHN COTTON, at 184, Washington St. corner of Franklin St., to whom all communications must be addressed, *postpaid*.—Price three dollars per annum, if paid in advance, three dollars and a half if not paid within three months, and four dollars if not paid within the year. The postage for this is the same as for other newspapers.